Clinical Quality Workgroup
Draft Transcript
May 12, 2011

Presentation

Judy Sparrow – Office of the National Coordinator – Executive Director
Good afternoon, everybody, and welcome to the Clinical Quality Workgroup. This is a Federal Advisory call, so there will be opportunity at the end of the call for the public to make comment and we will be meeting here for about an hour and a half. Let me do a quick roll call and also remind workgroup members to please identify yourselves when speaking. Jim Walker?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Karen Kmetik? David Baker? Anne Castro?

Anne Castro – Blue Cross Blue Shield South Carolina – Chief Design Architect
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Chris Chute? Bob Dolin? Floyd Eisenberg?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
David Lansky? Gene Nelson?

Gene Nelson – Dartmouth – Prof., Community & Family Medicine & TDI
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Eva Powell? Phil Renner?

Phil Renner – Kaiser Permanente – Principal Consultant, Metrics Development
Yes.

Judy Sparrow – Office of the National Coordinator – Executive Director
Danny Rosenthal?

Daniel Rosenthal – National Quality Forum – Senior Advisor, HIT
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Joachim Roski? Rosemary Kennedy?

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
John Derr?

John Derr – Golden Living LLC – Chief Technology Strategic Officer
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Tom Tsang? Aneel Advani?

Aneel Advani – Indian Health Service – Associate Director Informatics
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
Jon White? Patrice Holtz?

Patrice Holtz – CMS, HHS
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Ken Gebhart? And did I leave anyone off?

David Lansky – Pacific Business Group on Health – President & CEO
David Lansky joined.

Judy Sparrow – Office of the National Coordinator – Executive Director
David. Thank you.

Joachim Roski – Engelberg Center for Health Care Reform – Research Director
Joachim Roski.

Judy Sparrow – Office of the National Coordinator – Executive Director
And Joachim Roski. Karen Kmetik, are you on yet? Anybody else?

Helen Burstin – NQF – Senior VP, Performance Measures
This is Helen Burstin. I just joined as well.

Judy Sparrow – Office of the National Coordinator – Executive Director
Oh, good. Thank you, Helen.

Helen Burstin – NQF – Senior VP, Performance Measures
Sure.

Judy Sparrow – Office of the National Coordinator – Executive Director
And I'll turn it over to Jim Walker.

Christopher Chute – Mayo Clinic – VC Data Gov. & Health IT Standards
And Chris Chute joined.

Judy Sparrow – Office of the National Coordinator – Executive Director
Thank you, Chris.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Thank you, Judy. So, first we'll review today's agenda. We're going to start with – Helen Burstin graciously has agreed to review the eMeasure roadmap and the Methodology Tiger Team's findings for the first part of the meeting and then Floyd Eisenberg is going to take us through some example measures to help us continue to stress the Quality Data Model (the QDM). One of our early tasks, of course, is to come to as much conviction as we can, given the time, that the QDM is adequate for capturing the data we'll need to manage measures effectively. And then at the end of the meeting we're

going to talk a little about the May 19th Joint Meeting with David Lansky's – what is it, Quality Measures? No, the workgroup from the Policy Committee.

Helen, thank you again for joining us and we look forward to your review.

Helen Burstin – NQF – Senior VP, Performance Measures
Great. Thank you, everybody. Could you guys pull up my slides? I see you have them there or do I do that?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
I think the first one is up.

Judy Sparrow – Office of the National Coordinator – Executive Director
If you say, "Next slide," Helen, she'll flip them for you.

Helen Burstin – NQF – Senior VP, Performance Measures
Okay. I'm on the Web site, but I'm not seeing it. I'm still seeing the agenda up.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Oh.

Helen Burstin – NQF – Senior VP, Performance Measures
I may – I'm sorry – we just finished our board meeting. I may just be in a weird hotel space. So that's fine. I'll just follow along on mine and hopefully we'll be on the same place. So we're on the title screen. Next slide, please.

Tom asked me to provide an update on some of the methodologic issues related to the use of eMeasures based on some of the work we had done with the Gretzky Group, part of the NQF Report we had put forward to ONC in August on Identification of Potential 2013 eMeasures. As well as work done ... I did chairing the Methodologic Tiger Team Report we did back in October of 2009, which feels, alarmingly, like a very long time ago. So what we thought we would do is just review part of what had already come up through those processes to date and then some follow-up on some of those issues and some conversations I've had with Floyd on some things we just want to float by the group for your consideration.

So next slide begins – it says, "Methodologic Issues – the NQF eQM Report." We, as part of the work of the tiger team, John and I and a very great group of folks listed out what we thought were some of the key – I'm sorry. This is from the actual NQF Report. We listed out what we thought were some of the important methodologic issues that would come forward. Interestingly, I think there is a blend here of issues that really are about measurement and measure construction and some that are about HIT and I'll try to make some distinctions there.

The major issue we talked about was the use of delta measures. One of the first things is which kinds of outcome measures are most amenable to measures of the change over time. How do we determine the two comparison points in time? And if there are multiple results in a given period do you select, you know, what is the rule for selection of best, worst or average for example? Some of these may be related to HIT, but I would argue most of these are really about what the evidence would dictate and the way the measure is constructed.

The last one here is more so, I think, an HIT related issue. If the delta occurs across different providers, how is the change in performance attributable to different providers? So it's an HIT issue, as well as a measure or attribution issue.

Part of our report also looks at patient-reported information and I know that was a major focus of the concepts going forward for meaningful use. We specifically talked about the need to further understand the complexity and length of those tools, if it could move to a Web-based interface rotation and more work

on understanding potential differences and measure performance depending on mode of entry. So, for example, we're currently looking at a measure of that improvement in visual status following cataracts, where the original work was done on a face-to-face survey. The developers are now talking about having it be a mail survey; do we know what those differences might be, as an example.

And lastly, for patient-entered information via PHRs or the Web we need to further understand how we handle conflicting information from patients and providers; for example, different perceptions of what's actually on the med list. That's an important issue.

The next slide, the second slide on the methodologic issues we identified in the Gretzky eQM Report: First, being able to match the level of the measure to the capacity of the health system. So some of the idealized measures we often talk about would work well in a fully interoperable system, but may not work at the level of EHRs and interoperability we currently have. Secondly, if a measure is designed for systems that have that easy access we'll need to think about how to accommodate those who don't have as high a level of integration.

And lastly, in terms of measure harmonization, something we spend an awful lot about, regardless of whether it's an HIT issue or not is that as measures are being developed with different specifications, with detailed specifications for one platform, we don't know whether they'd actually work for EHRs. Some of the work Floyd and the measure developers have been doing around retooling certainly point that out. And some relatively simple convictions, like calculation of age and period of measurement are going to need some standardization as we move forward.

Next slide. Next I just wanted to queue up a couple of slides on what the Tiger Team, the Methodologic Issue Tiger Team, had teed up back in October when we were asked to identify some of the key methodologic issues to consider in the areas that you're talking about today, like longitudinal measurements and delta measurements.

So, next slide: Some of the issues we had talked about as part of the Tiger Team work was thinking again, similar to what we had put in the Gretzky Report, consider the types of measures most amenable to delta measurement; determine the appropriate points in time for baseline or follow-up – again, not so much an HIT issue. We can translate that into HIT, but thinking about how we actually do the measures piece of this and I'll talk shortly about some work we're going to do this year.

We need to consider standards for the degree of change you would look at in terms of the delta. Is it a percent gap to threshold achieved, a percent achieving any improvement or in the percent of improving an absolute delineated amount of improvement?

And then recognizing that some outcomes don't have linear trajectory. Sometimes you'll have lots of variable performance in terms of A1Cs or blood pressures and also need to consider when a lower limit, for example, for some of these may be associated with harm. Again, these are issues we're facing broadly. They're not necessarily in HIT, but since HIT will enable some of these more readily than we can on paper, we had teed these up in the Tiger Team.

Next slide: We also talked about it's important to, at times, consider whether some of the delta measures actually give you better assessments of performance ... a valid alternative in some of these instances. Think about when additional testing is required to determine if they actually do provide additional information and for population health kinds of measures. How do you handle the delta measures if the test wasn't performed for all patients? So some folks may not actually interact with the healthcare system. How do you handle delta measures for those who don't have baselines for example?

We'll skip the next one since it's related to an issue we're not going to talk about today.

And lastly, the Tiger Team also talked about understanding incremental quality measurements that we need to ensure that, again, the capacity issue we've talked about and then to get issues of equity we

need to standardize the strata for race, ethnicity and language and then also think about some coding inconsistencies we already see between different types of providers.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Okay. Just a note: I think you're a slide off on the screen right now.

Helen Burstin – NQF – Senior VP, Performance Measures
Oh, thank you, Floyd. So what are you guys on now?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
They're on slide eight and you just talked about it.

Helen Burstin – NQF – Senior VP, Performance Measures
Wonderful. Okay. So if we could move to the one that starts at the top with, "Standard data capture and management"? Hotels are notorious for having poor communication to the outside world.

So, on this one I just pulled up some of the key issues, as I said, the Tiger Team had teed up and then Floyd and I had a little bit of discussion and put forward some key – we thought just really food for thought for some of you as you kind of chew on some of these issues. So this issue of difficulties with standardized data collection, harmonization and measures across data platforms, thinking about how we capture information in a standard manner, the Quality Data Model might actually be able to help serve in this function.

A lot of discussion ongoing about typical use for value set registries to allow consistent and standardized reuse of value sets for data elements with the same meaning, thinking about how we actually can move towards getting those standardized code sets. Where they would live, who would develop, store and version them over time I think is something still under discussion.

Next slide, my slide ten I believe, beginning with, "Interoperability issues": I've seen a lot of discussion about interoperability issues, as I just laid out there in the previous set of slides. I won't repeat all of these, but just in terms of potential recommendations, these are opportunities, as Floyd and I talked these through, where you might encourage interoperability through a variety of mechanisms, like certification, meaningful use standards registries, HIEs and other means.

Next slide, "Attribution issues," at the top: Again, this issue we talked about; difficulty of attributing care to a specific provider over time across multiple settings and providers and the need, potentially, for a shared patient identifier to track patients across providers. And some recommendations there are, again, I think some of this is very much nothing to do with HIT, but just thinking about models of attribution. We've just started to do some of this with our review of our resource, the resource use measures that were recently submitted to us that do come with attribution models. We'll need to think about how some of those interactions may not, in fact, be physical interactions, physical encounters as we move towards more eMeasures.

Next slide; the top of the box says, ""Check box" issues," there. We had talked as part of the Tiger Team work that not all measure concepts are really equally amenable to a longitudinal data capture and we want to try to avoid measure concepts that really get a check-box idea, i.e., "Yes, I did smoking cessation," or, "Yes, medication reconciliation was performed." In this instance I just want to point out we actually did recently put out the measure guidance that we hope is steering measure developers away from check-box measures and to measures with richer information underlying them.

And some measures that may be considered check-box in the non-EHR world translate more into attestation at the point of care in the EHR space and we're going to think through some of those issues of algorithms that could help us define those concepts as people move through the EHR.

Next slide; the "Patient reported data issues," as being another issue to track: At times it's hard, for example, in terms of issues to deal with and track the untoward effects of improving clinical end points, for

example, for over ... on blood pressure, just as an example. The strong interest in understanding health status before and after preference sensitive procedures, as they do quite often in the U.K. and we're trying to move towards here and then lastly, to capture those patient-reported outcomes. What kinds of emerging technology will help address some of the literacy gaps many of us are concerned about?

So in terms of recommendations there, we are launching a new project with HHS funding specifically to look at some of the methodologic issues ... issues related to the use of patient-reported outcome measures for accountability, so I think some of these issues that are not HIT specific we'll be able to share with you as this year progresses. And then, as much as possible, think about opportunities for using validated evaluation tools rather than necessarily expecting EHRs to capture the individual components and then combine them. So, for example, the piece with improvement in the PHQ-9, the depression measure that was endorsed by NQF and retooled is an example of the ability to pull together the entire tool in the EHR and then look to see whether people have remission at 6 and 12 months.

Requiring that measures specifically identify the type of device and methodology that they'll use to capture and display data is something Floyd could forward that I want to just mention to you.

Next slide: The next few slides, we're on the problem list issues. Those are very prominent in our discussion in our Methods Tiger Team. Lots of concerns about the reliance on the problem lists in terms of accuracy of coding. Coding can be variable by type in terms of the issues listed here and, obviously, this group would consider whether there is a need to and a long-term vision of establishing some standards there and enabling some implementation guidance around coding for problem lists.

The second one down there: The need for standards for specifically coding problems, things like active versus inactive, date of onset for a new disease process. Some of these and the issues are not consistently maintained and it seems like this might be an issue squarely for the Standards Committee to consider whether there are some opportunities there to think about verification, meaningful use requirements and some standards around the attributes for problem lists.

The next slide on problem lists mentions a couple of the other Tiger Team comments. We had talked about how do we move towards; and I think this is actually David Baker's comment. I hear him on the phone. Clinicians should begin considering the problem list as a quality measurement-reporting tool that they need to start really paying attention to. We need some conventions about how to handle problems that are resolved or could be deleted from the problem list. We need to establish rules for the consistent use of the problem list and past medical history and when is it okay, for example, to go to past medical history or past surgical history if it's not on the problem list and then some guidance for the proper use of the list for reporting of new conditions. So, in terms of these issues, problem lists certainly should be a central point of coordination, but they're not consistently capturing them with interactive tools to support our information workflow and encourage clinicians to use them. They're not routinely maintained, as we know, as much as they should be, so one potential recommendation to this group is think about certification requirements that would enable problem lists as interactive tools to support that workflow and clinician usage and then meaningful use requirements for, as we've talked about medication reconciliation, problem list reconciliation as well from Floyd there.

And I think I'm done. Those were the issues we keyed up in both the Gretzky work, as well as the subsequent Tiger Team work, so we hope suggestions that some issues we would look towards the Standards Group to help us with. Now I'll turn it back to you, Jim.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Thank you, Helen. Does anyone on the committee have questions they'd like to ask Helen?

Christopher Chute – Mayo Clinic – VC Data Gov. & Health IT Standards
Helen, excellent presentation. I am very appreciative of many of those ... which are thoughtful, but you kept asserting in many cases that there was this distinction between quality measures and HIT. At some level, of course, I understand what you're talking about, but I – to what degree do you believe that going

into futures they're ... intertwined and that it is going to be unscalable to do quality measures unless we enable them through HIT?

Helen Burstin – NQF – Senior VP, Performance Measures
Absolutely. Yes. I think you're absolutely right, Chris. I didn't mean to imply that those are issues that are really divorced in some way, but more so to make the point that I think as I'm talking to you guys with a standards kind of focus these are issues – some of them are grounded in evidence. Some of them are grounded in basic measure construction regardless of the data platform. I was just trying to make that point, but I think you're absolutely right. As we move forward and we move towards all measures, we hope, that are applicable pulling data from a clinical record that are built de novo from EHRs we, of course, will be dealing with this, we hope, 100% or almost 100% of the time in the EHR context. If that answered your comment?

Christopher Chute – Mayo Clinic – VC Data Gov. & Health IT Standards
No. That's excellent. Thank you.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Helen, you noted that whether and when delta measures are preferable to threshold measures is not clear. Did either of the groups identify any evidence on the question?

Helen Burstin – NQF – Senior VP, Performance Measures
I don't know that we got into it that deeply, but I think certainly, there are examples and this comes up, I think, more so on a measure-by-measure example where there is clear evidence. For example, the medical outcome study, a significant intervention like a hip or knee replacement and the expected increase in performance. This exact discussion we just had with our surgery committee on what's the expected improvement in visual function – I think in some ways the literature would suggest that a very clear-cut intervention, whether it's an expectation of improvement would be the one to look at first.

I know Gene Nelson is on the call as well. We've had a lot of these discussions about some of the generic health status measures and whether, in fact, being able to look at a delta for a general population over time on the tool that can be fairly insensitive to some of this may not be optimal. You might want to try to initially consider some of these issues. Our new patient reported outcome project that we're just going to start launching, one of the key questions we're going to ask the expert panel, as well as the commission paper, is to really delve into this exact issue. When would you move towards a condition specific measure with a known intervention versus a generic measure? When would they be used for different opportunities? In our instance we're mainly talking about ones of measures that would be used for accountability. While I recognize many of these could be used in terms of improving my performance as a clinician, sitting at my desk they may not be ones you could scale and report a delta on as a performance measure.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Other questions?

Helen Burstin – NQF – Senior VP, Performance Measures
Anything to add there, Gene?

Gene Nelson – Dartmouth – Prof., Community & Family Medicine & TDI
Well, I think that the point that you're making is a good and important one. That starting with the medical outcome study in the '80s and now with the U.K. experience, it may be wise to focus the patient reported outcome measures on clinical populations where there really is a likelihood to see important benefit in functional status, as an example.

Helen Burstin – NQF – Senior VP, Performance Measures
Yes.

David Lansky – Pacific Business Group on Health – President & CEO

Jim, it's David. Can I ask a question –?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Please.

David Lansky – Pacific Business Group on Health – President & CEO
Of Helen and Gene? Just thinking about the NHS data, I was looking at the most recent release they put on-line and I'm wondering have you guys or has anyone you know done a variety of alternative models based upon the NHS data to look at? For example, the total hip or total knee data, alternative ways of representing comparative performance across provider systems based on their actual empiric data that they're putting out now?

Helen Burstin – NQF – Senior VP, Performance Measures
Yes. That's an excellent question, David. I have not seen it and I think some of this is because at least for some of the more longitudinal measurements they're talking like six months out. Improvement after stroke care, for example; I don't know that they have some of that data, but we'd be happy to follow up.

David Lansky – Pacific Business Group on Health – President & CEO
Yes. One thing that's interesting is I downloaded the data spreadsheet –

Helen Burstin – NQF – Senior VP, Performance Measures
Oh, okay.

David Lansky – Pacific Business Group on Health – President & CEO
And I think even in the aggregate you can look at some interesting inter-trust or inter-hospital variation and I'm assuming someone in the NHS Team has done alternative ways of representing the data, but I think it would be very instructive for a committee like ours to start getting educated about some of the things you have in your slides. You know, do you represent absolute scores, relative scores –

Helen Burstin – NQF – Senior VP, Performance Measures
Right.

David Lansky – Pacific Business Group on Health – President & CEO
And so on and so forth.

Helen Burstin – NQF – Senior VP, Performance Measures
Okay. Well, we're happy to follow up as well as part of this ... project that we're launching.

Gene Nelson – Dartmouth – Prof., Community & Family Medicine & TDI
Another source of data on that would be the SPORT Trial on back surgery versus non-operative care where functional status and using SF-36, as well as the number of spine specific patient-reported measures are used. They now have over four years of data for operatively treated and non-operatively treated patients that could be looked at in that manner, which way of analyzing the data is best and most useful, most sensitive.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Other questions? Helen, this is Jim Walker. I have another. On slide seven, your mention of warfarin triggered it –

Helen Burstin – NQF – Senior VP, Performance Measures
Yes?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
One of the standard measures for warfarin therapy is percent of time in therapeutic range. Has that been considered? And you can imagine for blood pressure, for diabetes, hemoglobin A1Cs, cholesterol, that that might be a useful measure. Does that have problems with it?

Helen Burstin – NQF – Senior VP, Performance Measures
It's an interesting measure. It would certainly be something I think many of us would like rather than the point in time estimates when the one time you capture it they're not in range, but I assume that it's more logistical than anything else. I think it would be probably be difficult to capture the data over time and figure that out. There are lots of issues involved. I don't know if anybody else on the call has had any experience with that. I've not seen anything like that submitted to us, nor was it submitted as part of our work we did on the environmental scan for available eMeasures.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Certainly, well at least the trials of warfarin I'm aware of that's the standard measure –

Helen Burstin – NQF – Senior VP, Performance Measures
Yes.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
For warfarin, but it seems like it would make sense for the others also.

Helen Burstin – NQF – Senior VP, Performance Measures
Yes. I mean I think if it was easier to do, it might be something people have talked about. Again, I think some of our current measurement is still based on what we have available, but I think perhaps –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Sure.

Helen Burstin – NQF – Senior VP, Performance Measures
Again, the hope would be we'd get a lot more information with an EHR and people could start really thinking ... differently about how they construct measures.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Right. Okay. Other questions for Helen?

Karen Kmetik – AMA – Director Clinical Performance Evaluation
Jim, I'm sorry if it's noisy. I'll go on mute again, but I had a question just, Helen, thank you very much for sharing. Does anyone know – so if we want to move towards a time when it's routine to have patient-reported outcomes, say functional status or other tools like that, entered into the EHR I'm trying to think – so what is it that we would say so the EHR vendors? What is it that we'd want to build into EHR certification that's not there now that would make this more easier from a functionality standpoint? How would we want data to get into the EHR from patients? Does anyone have thoughts on that?

Gene Nelson – Dartmouth – Prof., Community & Family Medicine & TDI
I think Jim Walker from Geisinger will have a response as well. In Dartmouth-Hitchcock, as you might know, we have been using patient-reported data in about 17 different clinical populations for up to a decade and we recently converted to Epic and in doing that we lost a lot of the functionality for getting patient-reported data and so now we're asking Epic to do things along the lines that you're asking about. So some of the basics are, so for example, a person is going to have a knee replacement; we want that patient to have alerted through their PHR portal that they're invited to complete a survey in advance of their visit to their surgeon or in advance of their visit to another physician to look at osteoarthritis of the knee. Then that survey has a standard set of modules, general functional status, as well as disease specific modules.

Then that survey is transmitted, the results, back to the patient in a summarized and understandable format, as well as fed forward to the clinician that will be seeing that patient so that the clinician and the patient can view those results as part of the consultation and part of making the plan about the current health state. And then as the patient, let's say, has surgery or not and is followed at 6 months and 12 months, again, the re-invitation to complete the survey, the now data tracked over time to show that

patient and the clinician the delta and, let's say, functional status and to the specific status. That that is available to show progress of that, the progress at the patient level and then can be exported to an analytic program or software that would allow you to look at the population of patients.

And so we're making this easy for the patient to know that they have a survey to complete and then seeing their results. And easy for the clinician or clinical team to know, to alert that patient and to have those results at the point of service to fine-tune the treatment plan or to revise the treatment plan and to see how that treatment plan is working against those outcomes over time. And then to aggregate it up so that you can look at the delta, let's say, at two years for people treated operatively or non-operatively.

Karen Kmetik – AMA – Director Clinical Performance Evaluation
Gene, that is really helpful and I just want a follow-up question. Did you enable that functionality in working hand-in-hand with Epic or you gave them your requirements and they made it for you? How did that happen? Because to me I think that's part of our charge, Jim, if I'm on track here; that knowing the types of measures we want to move towards, what types of functionality or standards do we need to outline pretty clearly now.

Gene Nelson – Dartmouth – Prof., Community & Family Medicine & TDI
Right. Well, we've asked that, but Epic has only been able to deliver some of that and in this case they have indicated that within a couple of years they will probably be able to have a general release of general Epic software that will accomplish everything we're asking for now. But in the short-term, to maintain the functionality we would have to do a lot of specialized programming along side or on top of Epic and I think that's been Geisinger's experience; that when they use patient-reported information they've had to do a lot to accommodate it and that's why Jim may wish to comment on the Geisinger experience.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
You're right, Gene. This is Jim. It takes considerable external and, to your question, Karen, I think we need to create a roadmap if we can to let health IT manufacturers have a trajectory. Because, at least as far as I can tell, everywhere this has been done at all it's an iterative process where our understandings of our needs change as we become more sophisticated about managing care processes and so our specifications to the software, to Epic in this case, change. We start out doing lots of things outside the EHR external decision engines, external communication channels, different things. Over time those typically become more and more integrated, which makes them more and more efficient and very importantly, more and more feasible for small organizations that can't afford all of the jury rigging.

But, I think one of the things for instance that we need to get clear if we can and probably signal the industry on is when you have patients providing input some of what they put in, we know from research, is more accurate than what a physician or nurse would capture and as accurate as a nurse interviewer and there's no sense sending it to anybody. So, as an example, if you ask people to tell you their height they do it better than the average nurse rooming the patient does it. Obviously, then if you ask them about weight that's a different thing.

So one of the things EHRs are going to need to be able to do in this roadmap is have a routing function that says this one, the patient just puts it in and there's no sense of anybody validating it. People will refer to it or it will just be processed when it's needed versus the ones that need to go to somebody, as Gene was saying, and be processed, become part of the patient-clinician negotiation, you know, the things that happen there. So I think we do have an opportunity here to – we'll have to figure out where in the work plan it goes, but to think through what this would look like and then create a set of certification standards that would get us from here to there in a reasonable step-wise process probably.

Phil Renner – Kaiser Permanente – Principal Consultant, Metrics Development
Yes. We've recently done something like what Gene describes for the PHQ-9 tool for depression where we can push it out to patients, have them complete it and then it ends up populating back in the record. So I think that, Karen, to your question, I mean I think that we need to make sure that any requirements, either an accreditation, a certification or to the vendors sort of expands the ring of their accountability to

making the PHRs or portals a two-way street. The other thing that I think is important is also to make sure that the capabilities to capture that, the results as structured data, both for analytics as well as for reporting –

Karen Kmetik – AMA – Director Clinical Performance Evaluation
Yes. Yes. That's helpful, all of you. Thank you.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Helen, again, I have one other question on slide 14. We have found at Geisinger that we just need to create new diagnostic codes, things like eight weeks after someone has an acute MI recorded in the EHR their diagnosis is automatically changed to coronary disease post MI and some of those – the same thing with chronic kidney disease. It just says GFR exceeded 30 –

Helen Burstin – NQF – Senior VP, Performance Measures
Right.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
So that, number one, it communicates better to clinicians and patients, but also then those diagnostic codes are linked to care plans and, obviously, the patient and the doctor decide if it's appropriate, but there's a provisional linkage. And so it seems to me that it's worth thinking about code sets. As far as we can tell, neither ICD-9, nor ICD-10, nor SNOMED have that concept of a diagnostic code that represents a clinically coherent condition that is likely to have other things, like monitoring and care plan and different things that link to it. I'm thinking maybe we want to address that somewhere in all of this.

Helen Burstin – NQF – Senior VP, Performance Measures
It sounds logical. I certainly don't have the coding expertise, so I'd defer to people like Floyd and Chris and others to see whether SNOMED, for example, has any of that additional functionality.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Right.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
I'll address that and I know Chris can talk to this much better than I could, but I would think the SNOMED hierarchy has some of what you're looking for, but maybe not everything. I don't know.

Gene Nelson – Dartmouth – Prof., Community & Family Medicine & TDI
If so, we haven't found it. I think we can stress it in the workgroup.

Christopher Chute – Mayo Clinic – VC Data Gov. & Health IT Standards
No. I can certainly assert that ICD doesn't have it and part of that is it's legacy from a mortality coding system where, I mean once you die this notion of having follow-up management issues becomes less important.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Great discussion. Helen, thank you. Any last questions for Helen? You've been very gracious with your time and we're very grateful.

Helen Burstin – NQF – Senior VP, Performance Measures
Oh, my pleasure. I can hang around for a little bit. Thank you.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. All right. Then next on the agenda is Floyd and using some Strawman measures to continue to try to stress the QDM. Floyd?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant

Sure. So when I was accepted – I'm from NQF – but that's okay, what we did was Tom Tsang had provided to me basically a spreadsheet that – trying to look at some of the quality measures that had been recommended by the Quality Workgroup from the Policy Committee and to look through them and see what are some of the QDM elements that could be used to represent them.

So I think we do have the spreadsheet that is available to download from the site. Are you able to show it as well? And, Jim, I think you wanted to start work on the one on patient safety – remind me which one we're – I'm sorry. Which is the one you wanted to look at?

W
We will have that document up, available on the Web momentarily.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Sure. So I'm just going back to Jim's comment to me prior to the meeting that – which was the patient safety and clinical appropriateness efficiency, so let's start with the patient safety. If you go on to – into that – okay, this is a different document than I thought we had. Is the Excel spreadsheet that has these sections not on the call? All right. So I'll talk about what's here now.

Part of what we identified in the QDM was for each of our categories of information we call concepts, so here in medication or physical exam or – scroll up, because this is a landscape document that was put into portrait some how and it's supposed to be wider, so just leave it there. So for each one of these we were trying to identify in the project last year which code set or terminology we would use to do the coding with the measure developers. In some cases, like medication, it was very clear in the certification rule because there are a number of vocabularies, as referred to here, that can – are included within RxNorm. RxNorm seemed to be the common thread that could be used to use one vocabulary or code set from which develop the individual value sets for the measures.

But if you scroll up you'll see in some of the cases, like – stop there – so in a device, if I wanted to know a pacemaker or essentially an intravenous catheter or it didn't come up in those measures, but an implantable cardiac defibrillator device what is the vocabulary we should be using for that? And that wasn't clear.

If we wanted to do – have communication, we want to look for an x-ray study, I could find terms in SNOMED. I could find them in LOINC. We could find them in CPTS Procedures for diagnostic studies, x-ray procedures, but which one should we use? So that it was a matter of looking for direction so that we could use the same vocabulary or code set from which develop these very specific value sets for each of the measures. And I think it applies more to just measurement, but if in interoperability organizations or ... or even practices were transmitting data if they use the same vocabularies or code sets to do that for different kinds of information it would add value.

So that was the purpose of this, is just showing where there was something, what we used, where there wasn't, there is gaps and that's, in a sense, an ask of this committee is how can we fill those gaps. What recommendations do you have?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Thank you, Floyd. Does the committee have any suggestions on this now or do we want to do this off-line? Why don't we see if there are any suggestions now? It probably would help if we know if are there some of these that are going to require commissioning and creation.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Floyd, you identified the device as one area. Are there others in this spreadsheet that have the same challenge? I was wondering if you could just speak to health record component again and just remind us what that is.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant

Sure. So that's a good point, Rosemary. Thank you, because that's actually one of our newer QDM concepts here. So the idea was where could we find things like this. Well, actually, there are – I can find devices in SNOMED and in many cases, in some cases certain devices aren't represented there, but there are ways to find many of these types of concepts. It may not have all of the content that might be required to do a specific measure and of the information within a measure and to say something, but there are at least some generic concepts that deal with these.

Health record component was something that was developed and added into this new version that's out for comment. The reason for that was we did have an expert panel last year that looked at ability to evaluate whether or not HIT was used effectively, thinking about utilization of the EHR itself or PHR. To do so the question was if I knew that a problem list was updated or that a discharge summary was transmitted from the hospital to a specialist or the follow-up physician we had to have a way to express what is this thing called discharge summary and we gave it the concept term health record component. We could also use that for what we would call a care plan. A care plan could be a component that has content within it.

The question then came up where would we look for this. Well, as I go through SNOMED there actually are health record artifacts. There is a section that deals with health record artifacts and that could express some, but not all of these. And there are a few of them also in LOINC. So some of them are available, some are not.

So what we were trying to do, and it would be – I mean we can give – I can give a more detailed presentation on each one of these concepts. We do have definitions for them in the technical specification we just published on the QDM, but that's what we're referring to as health record component. Does that help answer your question, Rosemary?

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Yes. Sure. So it's at that grouping level, I guess, if you will, a discharge summary, a referral that will have various other data elements contained within it and it would be shipped as a package or an entity in and of itself from one system to another?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Right. The intent was since some measures are looking to see that a care plan was shared that would be our ability to represent that within a measure by giving it a concept or a category of health record component. Correct.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Right.

Tom Tsang – ONC – Medical Director
Floyd, I'm wondering – perhaps the best way to go about doing this is to actually go over the five different examples you have and –

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Right and that's the –

Tom Tsang – ONC – Medical Director
And then perhaps we could do this, the polling. Jim, if you agree, maybe we can do the polling off-line?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Yes. Well, I wasn't so much interested in polling as identification of gaps and potential –

Tom Tsang – ONC – Medical Director
Yes.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant

Yes. So to just let me make a comment; the QDM has elements. The question is what code set do I use for it. So what I was looking for is in the spreadsheet that I know I had returned and I thought was here, there are different tabs and one says, "Patient and Family Engagement," one says, "Care Coordination" –

Tom Tsang – ONC – Medical Director
Judy had sent that spreadsheet to everyone.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Okay. So if you have that spreadsheet, is there anyone who does not who is on the committee?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
The name of that spreadsheet, Floyd, is Working Document 6May, so forth.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Right. Working Document 6 May 2001 Copy of Stage 2 Recommended Measures.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
So we'll just need to have everyone pull them up on your screen if you can. Floyd, you can keep sort of telling us where you are.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
If you look toward the bottom when you open it up there are several tabs. Jim, I think you wanted to look at Clinical Appropriateness and Efficiency.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Right. That would be fine.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
So if you go to, it's the fifth tab on the bottom, called Clinical Appropriateness and Efficiency. Now, if you scroll to the top you'll see the measure example that this is derived from is lipid control using Framingham Risk Score. The description; this measure evaluates lipid control stratified into a risk assessment scale using the Framingham Risk Score. The measure would require a computational algorithm using structural elements, age, smoking history, systolic blood pressure, total cholesterol, HDL cholesterol and BMI. And that was all I had as a definition for the measure, so in many respects that's the measure statement.

And from that what I tried to do, because I wasn't developing this measure, but trying to do it from what's stated here: We know we needed to have something about patient age and so we started with the QDM concept of patient characteristic. The value set is determining that there is a birth date and we would actually look for the date and which code list, code set is used to do that. The question is it could be several things. In this particular – in the case where we used it last year we used an HL7 term for birth date that's used in interoperable form, but the question is what would be the most appropriate code set to apply to birth date. And the fact that it is documented and it has a start there, the start and the end, which is the timing attribute, is the same for birth date. It's one day. And we would expect – it could come from the patient himself or herself, but in the example, I was giving if I, if someone were developing and say it had to be entered by a clinician, the source and recorder is the clinician, but the subject is the patient. You could have the subject – I mean the source and recorder the patient as well. It depends on what you want as a measure developer and so that's how QDM would address age.

If I go to column C, I want to know the patient's a tobacco user. So I would look for tobacco user and here in most cases we would go to SNOMED to identify tobacco user as the code set from which we would develop the value set –

Tom Tsang – ONC – Medical Director
Floyd, can I interrupt and ask you where would you put race and ethnicity in this?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
That's another – each would be another patient characteristic. So we have another term, patient characteristic, race. There would be a value set for one of the available races. I want patient characteristic, ethnicity, a value set of the available ethnicities from which they could use and that it exists. It's documented and generally timing attributes for those are similar to birth date. It occurs at birth. So it's a similar – that's another characteristic. Does that help, Tom?

Tom Tsang – ONC – Medical Director
Yes. And where would you overlay the computational algorithm then?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Okay. So can I get to that in just a minute?

Tom Tsang – ONC – Medical Director
Yes.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Because that is a good question. The first publication of the QDS just identified we have patient characteristic birth date, but in doing the project last year we recognized we needed to add the logic, so I'll get to that in a second, but what I wanted to do is just go through a couple of the other elements.

We wanted to know systolic blood pressure. That was listed in the measure description, so that's a physical exam finding. It is systolic blood pressure. The term systolic blood pressure is something we would apply from the codes or the concepts for systolic blood pressure from SNOMED, SNOMED being the code set used. And then, of course, if you are looking for a value we could, in logic, say greater than a certain or less than or equal to a certain value or just ask for the value. And so what I did here where it has line 11, QDM concept specific attribute, I just added value, provide the value. If you wanted to know if the value as above or below a threshold that could be listed there. Lab tests, in this case, would have used LOINC and total cholesterol is the lab you're looking for, so which LOINC codes apply are in the value set; the same with HDL in lab tests and the same now, column G, for physical exam, BMI.

Now, here is where the certification rule is, so you could use LOINC or SNOMED for vital signs. So that's why we'd look for what is the right one. You tell us which one is the right one to apply to vital signs and physical exam and then a specific value set in that code set can be developed, again, looking for a value.

Patrice Holtz – CMS, HHS
Floyd, so where in this, for the systolic blood pressure, would you put most recent if you're using start date there as the timing attribute?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Okay. So the question then is what we didn't know – what I didn't know, because this measure was not described in detail what was actually wanted, I just used the same term. Basically, if you wanted the most recent that's what you would put in timing attribute.

Patrice Holtz – CMS, HHS
Instead of start date?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Right. Correct. Yes. So, one of the challenges of working off of the measure statement is I need some assumptions, but they're not always the assumptions the real measure developer will want to use. So in this case it would be – it could be most recent or it might actually be a date/time and that would be a better way to actually say this. So if you wanted to know the time and in the logic of the measure – and that's where now how do I apply logic, so I want to know the birth date. I want to know only people over 18, so that's where in applying the QDM we have logic comparators we used. Those are presented in the technical specification document where we actually can say then the birth date occurred greater than or

equal to 18 years before the start of the measurement period so then I know you're over 18 or whatever age you want to use.

I can say tobacco user was evaluated or there was evidence of it during the measurement period so the during, the starts before the start of – I can also apply some mathematical operators, like most recent, last. All of those are listed, all of the options, but that's now where Tom was asking how do I apply the logic to each of these elements. We started with saying we need to define the elements. Then we need to apply them logically together to create statements or phrases. And then each of those phrases can be combined with other phrases to make the complete measure.

So what I was asked to do here was say in this measure what are the QDM elements, so here I did say logic can provide when each one is expected to occur so, Jim, I think your question was what about gender and Tom asked that as well. That's another characteristic.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Right.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
So I look for questions.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Floyd, in applying the logic did that add a layer of complexity in terms of structured codes that we don't have, that are not in SNOMED or LOINC or ICD-9?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
That's a great – that's Rosemary asking, right?

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Yes. I'm sorry.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Yes. That's a great question. What we did last year is what we did not want to do in this process, looking at how to apply the QDM, was making up our own terms. So we approached a subcontractor working with HL7 work and they provided the comparator logic element that is part of normative HL7 reference information model so that we would be using standard, some standard representation of applying comparison of one element to another and that we didn't just make up our own. So these came from HL7.

Tom Tsang – ONC – Medical Director
So in other words, if the organization doesn't use SNOMED there would be a crosswalk to ICD-9 or ICD-10?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
There could be a crosswalk, certainly, across the code sets and Rosemary was also talking about so if I would say last or if I would say, actually, starts before start of that's not something you'll find in SNOMED. That's part of the HL7 reference information model, version three description, but at least that – if any – the logic whenever someone is implementing an EHR my understanding is they would, having seen that and knowing what it means, be able to work towards expressing that in their queries into the record.

Aneel Advani – Indian Health Service – Associate Director Informatics
Just from that point, as well as sort of referencing back to the idea that the Quality Data Model might in fact, in one of Helen's slides it was sort of standards interoperability and the issue of what is a specification to communicate quality data in order to answer queries on quality came up. There was a sort of ... that the Quality Data Model could be used as a standard for that.

And so, as opposed to the Quality Data Model specifying a query, a measure definition and then the data elements that the English element of a measure definition refer to. Using the Quality Data Model as sort of implying something about how to do the queries and how to integrate information across parts of your EHR to get it in one place in order to actually answer the query for the quality information. I'll give you an example. If we have to query encounters and we need to use health exchange standards, like C32 or C105, then actually indexing the patient information across different clinics to answer the query for that patient implies something about how we integrate information in our databases or data warehouse or across transactional versus archival systems, etc. So that ... integration of how to combine information becomes important as opposed to just sort of value set languages that are used for the elements of the query. And it sort of relates to that idea of how you structure logic together. And so I was wondering if you have any opinions or kind of what do we collectively think that there needs to be there – just conceptual distinction between specifying quality reporting specifications versus the Quality Data Model for specifying the queries and not sort of mixing those two.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Right. Well, I'm not sure I have all of the intent of your question, but the reason we tried to use standards from or components under each one of our quality data model concepts. We actually do have a pattern that developed from the basically CDA model or reference information model, depending on which one was able to do that for us so that it would be expressed in a way that can be also expressed in C32 in order for – if it exists in C32 – or in a CDA model for interoperability. What we had to find is some way to express the logic itself, so if there are other, better ways we certainly look for advice on that, but I'm not sure I understood the –

Aneel Advani – Indian Health Service – Associate Director Informatics
Well, so I mean I think that's getting at it. I guess the question is how did you make the list of standards that are acquired from EHRs or the sort of content, the semantic content of the information, the health information that an institution would have in order to use a QDM or answer to the QDM in addition to the sort of element list here? Like SNOMED codes for this expression language that you would have an additional list that they either have to have be able to support the full HL7 reference information model for the sort of data model for their data or they have to be able to support certain health exchange elements and standards that are sort of different from just the value sets that they're using. In other words, the mechanism where they integrate and link information in these different expressions or these different data elements and that's the only way they can make sense and they will be able to compute a QDM specified quality measure.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Okay. So the reason we chose to do it this way was we had to have a term that had a specific meaning and so when quality measure developers have created their measures they've often added text around adding specific meaning so that you would capture the right information; in order to do that we had to go to find some standard to represent it electronically.

The question about does that mean an EHR has to comply completely with the HL7 or reference information model, I don't believe that is necessarily true in order to do the measures, but since we always use, say, to say medication administered, which is medication in a state of its use, always use the same pattern, whenever that's seen an EHR would be able to identify once they've mapped it once to the way they store that information; they would be able to reuse that. They would just be looking at a different value set the next time, so that was the purpose and the intent of trying to use those standards, but not to, in a sense, force the HL7 ... into every EHR. So does that help?

Aneel Advani – Indian Health Service – Associate Director Informatics
Yes. I guess the question for the committee is are there things other than the elements, the semantics of the sort of value set languages that the QDM implies, whether it's a little bit of the HL7 ... or other sort of linking constraints and if it does imply any of those then we need to make sure that's on the list of what we're actually adopting as sort of the standard or recommendations about standards. That's all I'm saying and that's –

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
So you're saying in addition to the QDM we need to look at the expression language to see if there are any gaps or any thoughts, because the expression language is very important, obviously, as two systems are sending information back and forth related to a quality measure.

Aneel Advani – Indian Health Service – Associate Director Informatics
Right. And in addition to the expression language there may be underlying assumptions about what's linked to what and in what way between these data elements and there may be EHRs that actually don't link in that way and so in order for that EHR to sort of compute something that's expressed in the QDM it would have to kind of do that linking additionally in it unless we specify that EHR vendor won't be able to test against that additional constraint and when people actually try to implement quality reporting with a QDM they won't actually be able to even though they bought a certified EHR.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Yes. I guess it depends on the data model of the EHR and whether they're able to get the information out in accordance with the definition of the expression language.

Aneel Advani – Indian Health Service – Associate Director Informatics
Right. Exactly.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Yes.

Aneel Advani – Indian Health Service – Associate Director Informatics
And if it's not full grown HL7 ... then what is it or what little bit is it?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Yes and just from our standpoint, our prime interest was to identify the QDM, but we recognized we needed a way to express logic, so we went to what we thought might work, but it doesn't. We look for advice on that.

Daniel Rosenthal – National Quality Forum – Senior Advisor, HIT
This is a great conversation about the increasing complexity of quality measures and it sounds like that the specific example on the table here is about the heavy lifting of, let's say, being able to calculate a regression model for the Framingham Risk Score. I mean the implicit requirement of EHRs currently to the quality measurement is can you handle and/or logic. Can you handle relative timing of a concept, A, happened before concept B? But now we're asking the question of is an additional requirement for EHRs to be able to handle more, more complex logic, such as doing regression handling.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Yes. And thank you for the comment, Danny. I just want to say I know you were involved in all of this process. We tried to – when we identified more complex logic issues we recognized that that was going to take additional input for how to do that.

Daniel Rosenthal – National Quality Forum – Senior Advisor, HIT
Yes.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
So what we often did is if you have a template that calculates the score, the score itself would be a health risk assessment score that has a number, so if it had a LOINC code we could import that into a measure, but how to actually calculate it, that was more complex.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Some of these are very complex, but is that – that's outside the scope of our efforts, you know? Because some of them are somewhat nested, like end is after end of, like that a medication would last for a certain

number of days of treatment after the end of, like, an inpatient episode or something like that. But that's not so much our challenge or maybe it is or is it outside the scope of what we're chartered to do?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Well, what we – so I'll go back to the chairs to ask further on that question, because measure developers often do want to provide that kind of specificity, which is why we used the comparators we did. I want to know that this happened within three days before or after an encounter and we have some measures that do that that we've looked at, so that's why we needed this and within three days after the end of that. But that's less regression logic than just describing relationships between two elements.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
Sure.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
So I look for advice on what you want to tackle as the committee, but the QDM had to tackle it to be able to provide eMeasures.

Rosemary Kennedy – NQF – Sr. Director of Nursing & Healthcare Informatics
And I think it provides tremendous guidance for EHR vendors, you know, the definitions, the descriptions and the examples that are provided in the QDM. So when I meant outside the scope, it's incumbent upon EHR vendors to integrate that within their models and their development.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Okay. Thank you. I would agree.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Floyd, is something like that, plus or minus three days – I'm sure it's not in the scope of this workgroup, but is there any requirement that those specifications have some level of evidence supporting them?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
So, Jim, that's a great question. What I can say is that was an example from one or two endorsed measures that actually looked for that and each of them was endorsed based on the fact of – based on evidence and whether it's three days, two days, one day or four days, I can't speak to whether that exact time frame had clear evidence, but I think it was – but I know it did go through an endorsement process. It had committee review and it had voting –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Right.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
About the whole thing, so the question is how deep does every piece have to have evidence to allow measurement and I'd have to leave that question to others. What we were trying to approach in the QDM is if there is such evidence how can you express it, so we're trying to make sure there's infrastructure to say whatever you might want to say.

Tom Tsang – ONC – Medical Director
For ONC this is one of the places where there's very large potential for adverse effect. Often when an interval is ventured it is not on the basis of much evidence. The classic example is – well, one classic example is bed rest. You give people 2 weeks of bed rest for low back pain and then ... tested it and found that 7 days was better than 14 and then he tested again and found that 2 was better than 7 and then tested again and found that none was better than 2. So understanding we can't have evidence for everything we do, we're going to need to be careful also that we don't have several hundred now specifications of what could be expensive for the patient and the healthcare system specifications that actually have no basis in evidence.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant

The only thing I'll comment on that is I don't disagree and that's the whole point of having evidence review and at NQF why we have an endorsement process to look at some of those things. But I will say, to use a different example, that for some care that needed to be delivered the condition had to be present according to those measures with greater than 45 days before the end of the measurement period to give – if it had just started, less than 45 days before the end of the cycle then it wasn't appropriate – it didn't seem appropriate to measure because there wasn't enough time to cause improvement. So there needed to be a way to express that it starts that this occurs before the end of the period, so those comparators are needed in order to state measures. So I question are we looking at how to evaluate evidence or are we looking at, which I think is important, or are we looking at how to express information in such a way that it can be consistently measured.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
I guess my question, Floyd, is where is that evidence being kept. Is that kept at the developer level and nowhere else or is that something the QDM needs to have or not?

Tom Tsang – ONC – Medical Director
Jim, I would think that we're looking really at Floyd's latter point, which is really looking at the expressing of the measure concept –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
That's fine ...

Tom Tsang – ONC – Medical Director
To your point, Jim, I think this is really at this measure ... and, Karen, correct me if I'm wrong, but I think the measure developers really, that the entire evidence and the science of this and that's the endorsement process that NQF will play a role in –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
That's fine. It's just a scope question and you've answered it.

Tom Tsang – ONC – Medical Director
Yes, this is really looking at the standards and the specifications of the –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. So are there other comments or questions about the Clinical Appropriateness and Efficiency measure that Floyd's been taking us through?

Tom Tsang – ONC – Medical Director
I just – I'm sorry to go back to this issue, Floyd, but if for this one measure, the lipid control one, you suggested SNOMED for physical exam and SNOMED for patient characteristic and I think – Aneel, are you on the line? Well, IHS –

Aneel Advani – Indian Health Service – Associate Director Informatics
Yes I am. Aneel is here.

Tom Tsang – ONC – Medical Director
Okay. So IHS had expressed issues with SNOMED, so how do we – Floyd, the question is how do we determine what is the best taxonomy or -

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Just quickly; Tom, this is Jim; could you tell us what their – what they thought the inadequacies were?

Aneel Advani – Indian Health Service – Associate Director Informatics
Well, we just traditionally relied on ICD-9, so we don't have an infrastructure that's based on SNOMED implementation and, for instance, we're struggling with implementing ICD-10 over the next year and a half and then also potentially SNOMED at the same time or later, so that's the issue.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
All right. And so for my response, I think that the concern we had here at NQF was we did not want to make a unilateral decision and we didn't have the ability with time to go out and do a full vetting of what code set is appropriate for every concept that came up. So we went back to what had been approved in Standards Committee and accepted in the certification rule or at least recommended by Standards Committee that didn't make this certification rule so that – because at least there was some or if that didn't have a recommendation what came out of HITSP, where there had been consensus process to develop what is the appropriate terminology or code set to use for this concept. And in some cases the field was open and nobody had come up with or no consensus organization had come up a recommendation. So the QDM does not specify which code set to use for any concept. The QDM says we need a value – it needs a value set from some code set or vocabulary. So what I look for is advice from a standards body to say what is the right one, because quality shouldn't use SNOMED when interoperability uses LOINC or vice-versa –

Tom Tsang – ONC – Medical Director
So can that –

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
Thought they were the same.

Tom Tsang – ONC – Medical Director
So would you say that that could be best worked out between the measure developer and the organization that would be e-specifying the measure or retooling the measure?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
No, absolutely not. I would say that one measure developer might choose LOINC. One would choose SNOMED. One would say we're going to use I-9 or I-10 or I-13. And the vendors and implementers would have trouble because they'd be all over the place. I think we need a more standard determination so when you're talking about devices here's what to use. When you're talking about problems or conditions and it's quality here's what you use. There is the tension of, for billing purposes we have to use ICD-10 and move to that, but what do I do for clinical? And so I think that's a central decision for not just quality, but for routine use of clinical data that ... important for this committee to address.

Patrice Holtz – CMS, HHS
And, Floyd, if I'm not mistaken for the HITECH measures that's why we included all code sets for each concept that had applicable codes for it, because we weren't sure which code set to go with. Correct?

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
That's correct and that's why in some cases there are HCPCS and CPC and I-9 and a mixture and we had some pushback saying you're giving us all of these. I can't do them all. Tell me which one is appropriate and that's what we're looking for advice on. You're correct, Patrice. We were trying to be as open as we could.

Aneel Advani – Indian Health Service – Associate Director Informatics
Tom, I mean thank you for the comment because, actually, it is actually rather insightful. I mean we could just say, "Okay, there is a preferred order of code set commitment, so to speak, for each part of the quality inspection, each element of quality measurement that then also matches up with interoperability," but there are sort of alternatives that are still relevant and semantically cover that element that you could use instead with some sort of negotiation between the eMeasure developer to say we would like to satisfy the queries and these ... code sets as well, as opposed to just saying well, because interoperability really has to have a handshake on both ends and therefore it really is a little bit more constraining on code sets that quality should also be extra constraining, so to speak.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer

I'm not sure I understood what you're saying, Aneel, but it seems to me that Floyd is right. That we need a single code set that people know if they use it they will meet any foreseeable standards expectations and maybe there are – well, ICD-9 was granted status as an interim code set, but you know, long-term I don't think we do want this to be based on the negotiation of a measure developer and a measure whatever – that will leave us as messed up as we are now.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
I also think that would be over burdening the measure developers –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Yes.

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
... at least 16 of them. They have varying expertise in different subsets and I think it could be more confusing and add extra work if we just allowed individual negotiation. I do think that UMLS and the National Library of Medicine have done a lot to provide maps and crosswalks between talk terminologies to allow interoperability and if there was one standard that was used for the interoperability and a map to what you have that could work. I just don't know that that's sufficient or funded sufficiently to support the enterprise, but that is one way to get there.

Aneel Advani – Indian Health Service – Associate Director Informatics
So I think those points are very well taken and I mean I understand the distinction. I think what will happen in the real world is the following: People will say, "Okay. Here is the quality informatics or perspective of the standard. Now I have to map to it." Or it will be interpreted as sort of a real constraint on the whole HIT infrastructure, in which case you're back to the original issue of actually by having standards you're really asking HIT vendors to sort of fully adopt the data model that's supposed to support quality and that may be completely reasonable. And on the mapping side there will be just as much noise in the sort of mapping steps as there would be with a more ... standard specification in the first place, but I agree that it's a question of who do you sort of burden with the actual work, the reporter of information or the specifier of the measure. It may be more intelligent to sort of farm that out to the people reporting, depending on if they have good intentions behind actually doing the reporting and benefits that the reporter receives.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
So, Aneel, who are you saying it would be harder for to have one standard?

Aneel Advani – Indian Health Service – Associate Director Informatics
Well, I mean anybody who has a legacy HIT implementation that isn't sort of perfectly matching whatever the current standard is.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
But I think – I assume – did HIT manufacturers not take it as a given that they can't have their system based on ICD-9 going forward?

Aneel Advani – Indian Health Service – Associate Director Informatics
Sure. I mean I think the HIT vendors would probably like to have new standards that aren't there before, because it makes them architecturally larger with all new systems, but the actual providers, who sort of bought into that – but I don't know. I mean maybe everybody has SNOMED except us and that's fine. You know, we'll put it in next year or something, but so I'm not speaking just specifically from our own particular perspective, but it's just depending on the standard and how ... the market is with that standard versus sort of is it really an additional constraint or not when you narrow your standard selection ....

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Yes. Well, I mean ours is currently based on ICD-9 and we accept that we have to go to SNOMED and ICD-10. SNOMED is the core, ICD-10 for when we have to bill something and we would prefer that the vendor did that work or some third party person as much as possible and if there were a single standard I

would think it would be more likely that they would be willing and able to do that and then required to by the market. Is that not true?

Aneel Advani – Indian Health Service – Associate Director Informatics
Yes. I think I get your point that if there were sort of a narrower standard in a sense there's more efficiencies of scale in terms of the market querying between vendors having a sort of more constrained goal and therefore ... providers that are buying the same product essentially and sharing the cost a little more than if there is actual market differentiation. So I'm not sort of pushing back the law upon the point. I just think that I'm glad we discussed it and realize that there are sort of tradeoffs ... multiple directions when we actually make these decisions. That's all.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Thank you. All right. Other comments, discussion on this one? So I don't know – can we get a sense of the group? Is it the sense of the workgroup that for this measure and maybe at least some limited extent for this measure type the QDM looks like it's able to manage all of the needs or have we identified anything that we don't think QDM can do?

Daniel Rosenthal – National Quality Forum – Senior Advisor, HIT
I mean it looks like that the QDM can handle very nicely the individual concepts for this. Questions that still remain are representing the logic, but that's beyond the scope of the QDM.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Would –

Floyd Eisenberg – Siemens Medical Solutions – Physician Consultant
The only thing I'd add to that is I'm not sure that the test of comparative logic is totally beyond scope, so I'd leave it up to the committee to determine that.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Tom, do you have a sense of that scope question?

Tom Tsang – ONC – Medical Director
I think, based on the discussions that we just had about the standards, I think with only three minutes left of this call I think the standard setting part is critical and I think we would have to work with Floyd off-line to get a list of all of the different taxonomy issues that he needs advice on and perhaps we could send it through e-mail or off-line to committee members and then discuss it on the next call after folks have read through it and have thought about it. How does that proposal sound to you, Jim?

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
That sounds fine. Are we confident that this is our task and not the Vocabulary Workgroup's task?

Tom Tsang – ONC – Medical Director
I checked that out with Doug's team and I'm still awaiting some response from them, but I think we're –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay ... of that –

Tom Tsang – ONC – Medical Director
But I think we can move forward.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Okay. Then we'll do that. Okay? Oh, and you're right – it's time for us to, so we'll stop here and get some work materials out to everyone between now and the next meeting and open it to public comment, Judy.

Judy Sparrow – Office of the National Coordinator – Executive Director

Okay. Just one reminder to everybody; we do have that meeting next Thursday, the 19th –

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Oh, yes. Let me take a minute on that.

Judy Sparrow – Office of the National Coordinator – Executive Director
I'm sorry.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
So, May 19th we have a joint hearing with David Lansky's Quality Measures Workgroup to hear from various stakeholders their experiences with quality measures in MU1 and their estimates of what in MU2 and MU3 would be useful to make their work more effective and efficient. You got the questions in the mail. We certainly welcome your participation in what I think will genuinely be a very productive and informative meeting and you have the agenda that you also got in the mail. Is there anything else on the May 19th, Judy? Okay. I'll take that as a no and then let's go ahead and open it up to public comment then.

Judy Sparrow – Office of the National Coordinator – Executive Director
I'm sorry. I was on mute. No. No. In the afternoon you just have the joint workgroup meeting.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Right.

Judy Sparrow – Office of the National Coordinator – Executive Director
Just a reminder.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Thank you.

Judy Sparrow – Office of the National Coordinator – Executive Director
Okay. Operator, can you see if anybody wishes to make a public comment?

Operator
We do not have any comments at this time.

Judy Sparrow – Office of the National Coordinator – Executive Director
Great. Thank you and I look forward to seeing everybody next week.

Jim Walker – Geisinger Health Systems – Chief Health Information Officer
Thank you, all. Have a good day.

Judy Sparrow – Office of the National Coordinator – Executive Director
Good-bye.

Public Comment Received During the Meeting

1. Wherever you can use code sets that are being used in other areas of MU the better. i.e. loinc is used for interoperability, it would be great if lojnc is standard for quality measures

2. For the vendor community the fewer standard vocabularies the better. It is very difficult to program functionality to map to many different codes sets.

3. There are issues with UMLS maps. The current snomed problems to ICD-9 map from UMLS is not up to date. Many of the codes are not current and we have had to do manually update the maps. If UMLA will be used there needs to be a mechanism to keep maps/codes up to date.